

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER NO. 81-1

NPDES PERMIT NO. CA0005401

WASTE DISCHARGE REQUIREMENTS FOR:

UNITED FINANCIAL OPERATIONS, INC.  
HERCULES, CONTRA COSTA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter the Board) finds that:

1. This Board adopted Order 77-113 (NPDES Permit No. CA0005401) on September 20, 1977, prescribing waste discharge requirements for Valley Nitrogen Producers, the owner and operators of a chemical manufacturing plant in Hercules.
2. The plant was subsequently shutdown and sold to United Financial Operations, Inc. which is hereinafter referred to as the discharger.
3. The discharger has filed a report of waste discharge (NPDES Short Form C) dated 30 August 1980.
4. The discharger proposes to operate only a portion of the chemical plant, namely the methanol unit. Wastewater consisting of an average of about 0.027 million gallons per day (mgd) of cooling water and boiler blowdown will be discharged into Refugio Creek, at a point about 800 feet upstream from its confluence with San Pablo Bay. Process wastes including methanol compressor blowdown, and sanitary wastes will be discharged to the Pinole municipal collection system.
5. The Board, adopted its Water Quality Control Plan for the San Francisco Bay Basin on April 8, 1975.
6. The beneficial uses of San Pablo Bay and contiguous water bodies are:
  - a. Water contact recreation
  - b. Non-contact water recreation
  - c. Navigation
  - d. Commercial and sport fishing
  - e. Wildlife habitat
  - f. Fish spawning and migration
  - g. Industrial uses
  - h. Preservation of rare and endangered species
  - i. Shellfishing

7. Effluent limitation and toxic effluent standards established pursuant to Sections 208(b), 301, 304, and 307 of the Federal Water Pollution Control Act and amendments thereto are applicable to the discharge.
8. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21000) of Division 13 of the Public Resources Code in accordance with Water Code Section 13389.
9. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
10. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that United Financial Operations, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Federal Water Pollution Control Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. The discharge of process waste, including methanol compressor blowdown, to waters of the State is prohibited.

B. Effluent Limitations

1. The discharge shall not have a pH of less than 6.5 nor greater than 8.5.
2. In any representative set of samples, the discharge shall meet the following limit of quality:

TOXICITY: The survival of test fishes in 96-hour bioassays of the effluents shall achieve a median of 90% survival for three consecutive samples and a 90 percentile value of not less than 70% survival for 10 consecutive samples.

3. The discharge shall not contain a chlorine residual greater than 0.0 mg/l.

C. Receiving Water Limitation

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place.
  - a. Floating, suspended, or deposited macroscopic particulate matter or foam;
  - b. Bottom deposits or aquatic growths;

- c. Alteration of turbidity or apparent color beyond present natural background levels;
  - d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
  - e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in receiving waters or as a result of biological concentration.
2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:
- a. Dissolved oxygen      5.0 mg/l minimum. Annual median - 80% saturation. When natural factors cause lesser concentrations than those specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
  - b. pH      Variation from natural ambient pH by more than 0.2 pH units.
3. The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Federal Water Pollution Control Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. Provisions

- 1. Neither the treatment nor the discharge of pollutants shall create a nuisance as defined in the California Water Code.
- 2. The discharger shall comply with all other requirements of this Order immediately upon adoption.

The discharger shall submit to the Executive Officer by March 21, 1981, a contingency plan for the continuous operation of facilities for the collection, treatment and disposal of waste pursuant to Regional Board Resolution No. 74-10.

- 3. The discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements" dated April 1977, except for items A.5, A.7, A.12, A.13, B.2, and B.5.

4. Order No. 77-113 is hereby rescinded.
5. This Order expires on January 21, 1986, and the discharger must file a Report of Waste Discharge in accordance with Title 23, California Administrative Code, not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.
6. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Water Pollution Control Act, or amendments thereto, and shall take effect at the end of ten days from date of hearing provided the Regional Administrator, U. S. Environmental Protection Agency, has no objections.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on January 21, 1981.

FRED H. DIERKER  
Executive Officer

Attachments:  
Standard Provisions & Reporting  
Requirements - April 1977  
Resolution No. 74-10  
Self-Monitoring Program

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM  
FOR

UNITED FINANCIAL OPERATIONS, INC.

HERCULES, CONTRA COSTA COUNTY

NPDES NO. CA 0005401

ORDER NO. 81-1

CONSISTS OF

PART A, dated January 1978

AND

PART B

PART B

SELF-MONITORING PROGRAM FOR

UNITED FINANCIAL OPERATIONS, INC., HERCULES,  
CONTRA COSTA COUNTY (FORMERLY VALLEY NITROGEN  
PRODUCERS, INC.)

I. DESCRIPTION OF SAMPLING STATIONS

A. EFFLUENT

<u>Station</u>	<u>Description</u>
E-001	At any point in the outfall from the treatment facilities for waste 001 between the point of discharge and the point at which all waste tributary to that outfall is present.

B. RECEIVING WATERS

<u>Station</u>	<u>Description</u>
C-1	At a point in San Pablo Bay, located approximately 20 feet bayward of the mouth of Refugio Creek.
C-2	At a point in Refugio Creek located approximately 400 feet upstream from the mouth of Refugio Creek.
C-3	At a point in Refugio Creek located approximately 1200 feet upstream from the mouth of Refugio Creek.

C. SHORELINE OBSERVATIONS

<u>Station</u>	<u>Description</u>
S-1	Located on land at the point of discharge to Refugio Creek.
S-2	Located on land at the mouth of Refugio Creek.

II. SCHEDULE OF SAMPLING AND ANALYSIS

The schedule of sampling, measurements and analysis shall be that given on Table I.

III. MODIFICATIONS OF PART "A" DATED JANUARY 1978

Exclusions: Paragraphs C.3, C.4, C.5.c, C.5.d.(4), D.4.b, F.3.g(2).

I, Fred H. Dierker, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 81-1.
2. Was revised effective on the date shown below.
3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger. Revisions will be ordered by the Executive Officer.

FRED H. DIERKER  
Executive Officer

Attachment:

Table I

Footnotes & Legend for Table I

Date Ordered

1-26-81

TABLE 1  
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSES

SAMPLING STATIONS	E-001		C	S				
TYPE OF SAMPLES	C-24	G	G	O				
Flow Rate (mgd)	Cont							
Chlorine Residual (mg/l)		(4) D						
Total Suspended Matter (mg/l & kg/day)	M							
Oil & Grease (mg/l & kg/day) (1)		M						
Fish Toxicity, 96-hr. % Survival in undiluted waste	(2) W/M							
pH (units)		Cont	M					
Temperature (°C)		2/W	M					
Zinc (mg/l & kg/day)	M							
Observations (3)		2/W	M	M				
Chlorine dosage (lbs/day)		D						

LEGEND FOR TABLE

TYPES OF SAMPLES

G = grab sample  
C-24 = composite sample - 24 hour  
Cont = continuous sampling  
O = observation

TYPES OF STATIONS

E = waste effluent stations  
C = receiving water stations  
S = land observation station

FREQUENCY OF SAMPLING

W = once each week  
M = once each month  
2/W = 2 days per week

#### NOTES

- 1) Oil and grease sampling shall consist of 3 grab samples taken at 8-hour intervals during the sampling day, with each grab being collected in a glass container and analyzed separately. Results shall be expressed as a weighted average of the 3 values, based upon the instantaneous flow rates occurring at the time of each grab sample.

If the plant is not staffed 24 hours per day or if the discharge does not occur continuously, then the three grab samples may be taken at approximately equal intervals during the period that the plant is staffed or during the period that discharge is made.

In the event that sampling for oil and grease once every two weeks or less frequently shows an apparent violation of the waste discharge permit 30-day average limitation (considering the results of one or two days's sampling as a 30-day average), then the sampling frequency shall be increased to weekly, so that a true 30-day average can be computed and compliance can be determined.

- 2) Toxicity shall be determined weekly for the first month of operation and monthly thereafter.
- 3) Observations shall be for floating or deposited oil, discoloration, or evidence of adverse effects on fish or other aquatic life in receiving water.
- 4) At least 3 times during the period May to October, preferably during periods of high chlorine dosage, grab samples shall be taken every 10 minutes during period of chlorination. This intensive monitoring may be discontinued if the discharger can show to the Executive Officer's satisfaction that chlorine residual requirements can be met by controlling chlorine dosage and duration of dosing.